

Childhood Immunizations
Vaccine-Preventable Disease Fact Sheet
Last Revised: 09/25/2000

Facts About Vaccine-Preventable Diseases

Diphtheria

Diphtheria is caused by a bacteria that is spread when an infected person coughs or sneezes. It starts like a cold with a sore throat and fever. It can lead to severe throat swelling that can block breathing. If it's not treated in time, the bacteria may produce a powerful toxin, or poison. This toxin spreads throughout the body, causing serious complications such as heart failure or paralysis. About 1 person in 10 who get diphtheria dies from it.

Immunization: DTaP, DT or Td

Haemophilus Influenzae Type B (Hib)

Haemophilus Influenzae Type B, or Hib, is a bacteria that can cause meningitis (infection of the covering of the brain), epiglottitis (infection of the upper throat), cellulitis (an infection of the deep tissues), arthritis (infection of the joints), pneumonia (an infection of the lungs) and bacteremia (infection of the blood stream). The greatest danger is from meningitis. The illness is usually seen in children under 5 years old, but children under the age of 2 are the most at risk because their immune systems aren't yet able to fight the bacteria. Before the vaccine was released, Hib struck 1 in every 200 children. About 12,000 children got meningitis each year, with 1 in 4 suffering permanent brain damage and 1 in 20 dying.

Immunization: Hib

Hepatitis B

Hepatitis B is a virus spread by contact with blood, semen, vaginal fluids and saliva. It causes a loss of appetite, tiredness, abdominal pain, nausea, vomiting and sometimes rash or joint pain. Symptoms vary from none at all to severe illness. The younger you are when infected, the more likely you are to become a chronic carrier for life; able to spread the infection to other people. Chronic carriers can also develop complications like cirrhosis (scarring of the liver) or liver cancer.

Immunization: HBV

Measles (aka rubeola, red measles or hard measles)

Measles causes a rash, high fever, cough, runny nose and watery eyes. The rash usually starts on the face and then spreads downward over the entire body. This rash lasts 4-10 days. Measles is one of the most easily transmitted diseases. Measles causes ear infections in 1 of every 10 children. As many as 1 of 20 children gets pneumonia. About 1 in every 1,000 children will get encephalitis (a swelling of the brain that can leave your child deaf or mentally retarded). For every 1,000 children who get measles, 1 or 2 will die of it.

Immunization: MMR

Mumps

The most obvious signs of mumps is swelling of the cheek and jaw, caused by swelling in the salivary glands. There is usually fever and a headache or earache. About 1 out of every 4 teenage or adult males develops a painful swelling of the testicles. About 1 in every 10 children can get meningitis (an infection of the coverings of the brain). It can also cause deafness.

Immunization: MMR

Pertussis ("Whooping Cough")

Pertussis is caused by a very contagious bacteria. It starts out as a cold with a persistent cough. The cough becomes worse, occurring in explosive bursts followed by a whooping sound and,

occasionally, vomiting. The whoop may be absent in older children and adults. The disease is hardest on infants under 1 year old. About 1 in 10 children develops pneumonia. About 20 in every 1,000 will have convulsions and 4 of every 1,000 will have swelling. Pertussis causes about 10 deaths per year.

Immunization: DTaP

Poliomyelitis (Polio)

Polio is caused by a virus that produces a weakening of the muscles. The illness ranges in severity from a mild, unnoticed illness to meningitis (an infection of the coverings of the brain) to paralysis and even death. Those who develop paralysis will often have weakness and disability for the rest of their lives.

Immunization: OPV, IPV

Rubella (German Measles)

Rubella is caused by a virus which causes a rash, low-grade fever and swollen glands in the area behind the ears. For most people, it is a mild illness. However, if a pregnant woman without protection against rubella is exposed to the disease, there could be birth defects in her unborn child.

Immunization: MMR

Tetanus (Lockjaw)

Tetanus, commonly called lockjaw, is a bacteria that is found everywhere; usually in soil, dust and manure. People usually get it through a cut or wound that becomes contaminated with the bacteria. It usually starts with a headache and stiffness in the jaw. As it spreads, it causes stiffness in the neck, arms, legs and stomach. The victim may have painful convulsions, which can be severe enough to cause broken bones. In the United States, 3 of every 10 persons who get tetanus will die of it.

Immunization: DTaP, DT or Td

Varicella (Chickenpox)

Chickenpox is caused by a virus. It usually begins with a mild fever and itchy rash. The rash starts with crops of small red bumps on the stomach or back and spreads to the face and limbs. The red bumps rapidly become blistered, oozy and then crust over. People may have only a few bumps or may be totally covered. Once a person has chickenpox, the virus stays without symptoms in the nerve cells. In some people (for some unknown reasons), the virus can become active later as "shingles" or zoster. While chickenpox is usually mild, around 10,000 people require hospitalization each year. About 50 to 100 deaths from varicella are reported each year, most of which occur in healthy children and adults.

Immunization: VAR

For more information on immunizations, contact the New Hampshire Immunization Program at 1-800-852-3345, extension 4482. You can also e-mail us at

immunization@dhhs.state.nh.us